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ABSTRACT

This preliminary case study of inter-organizational dissemination arrangements presents a conceptual framework for conducting large-scale investigations of state dissemination activities and its application in the organization and analysis of information dealing with such arrangements in Wisconsin and Utah. When the findings of the Wisconsin case study were organized and analyzed in terms of the conceptual framework, the dimensions showed promise of utility for a more comprehensive case study that would allow for on-site visits and in depth interviews. Information dealing with Utah dissemination arrangements was gathered from a small number of documents, telephone conversations, and several meetings, and the descriptions of inter-organizational dissemination arrangements were not sufficient to draw a clear picture of the status of state dissemination. The case studies are followed by a proposed research agenda aimed at providing an empirical base for making explicit those conditions which influence the performance and the effectiveness of inter-organizational arrangements; a discussion of policy implications; and a list of references. (RAC)

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INTER-ORGANIZATIONAL ARRANGEMENTS FOR DISSEMINATION: A CONCEPTUAL FRAMEWORK AND TWO ILLUSTRATIVE CASE STUDIES

Douglas Paul

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June 1978

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FOREWORD

This report is one of a series of efforts to illuminate and broaden our understanding of the programs, agencies, organizational arrangements, and structures that support educational dissemination in the United States. This particular study arose from a general interest in describing and analyzing state-wide capability to disseminate education-related knowledge and to provide improvement oriented technical assistance to schools. The idea of developing a model for comparing states in terms of their organizational dissemination structures can be traced to two unpublished National Institute of Education (NIE) staff trip reports which provided brief but provocative images of dissemination arrangements in two states. The reports suggested a number of contrasts which might be worth pursuing on an exploratory basis. NIE staff asked the Educational Dissemination Systems Support Program at the Far West Laboratory (FWL) to sponsor this exploratory effort, but with the explicit NIE request that no on-site field work would be involved.

FWL commissioned Dr. Douglas Paul to undertake the task. The choice of Dr. Paul was based on two primary considerations. First, he is the author of several monographs and reports on linkage and change and was actively involved in work on a transactional model of change. In a recent publication he reviewed an extensive body of literature and developed a series of generalization and inferences about change in education that were presented according to an inductively developed framework.* Consequently,

---

*Paul, D. A. "Change Process at the Elementary, Secondary, and Post-Secondary Levels of Education" in Nash, N., and Culbertson, J.(eds.), Linking Process in Educational Improvement. Columbus, OH: University Council for Educational Administration, 1977.

he is especially well informed concerning the pertinent literature and concepts, and has also demonstrated ability to develop conceptual frameworks to organize existing information. Second, Dr. Paul possessed extensive personal information regarding educational dissemination structures and activities as a consequence of his prior employment by the Wisconsin Department of Public Instruction and as a Research Associate at the Wisconsin Research and Development Center on Cognitive Learning (he has also served as an Assistant Professor at the Ontario Institute for Studies in Education where he studies dissemination activities and relationships between OISE faculty and OISE field agents). This breadth of in-the-field personal experience was especially valuable in the preparation of the Wisconsin case study.

Initially, the study was approached with the idea that states could be typified in general categories, based on the relative dissemination capability of and degree of cooperation between state and intermediate education agencies, and that states could be selected for case study as representatives of various types. However, closer examination of information available on several states made it apparent that state educational agencies were far from uniform among their various divisions in their levels of dissemination capability. Moreover, a variety of networks, consortia, and other interorganizational arrangements existed that served different educational audiences or divisional program interests. The idea of trying to pigeonhole states on the basis of a simple structural typology was abandoned, and replaced by a more complex framework that attempts to describe inter-organizational arrangements in terms of a dimensional conceptualization proposed by Benson (1973, 1975) and in terms of alternative strategies for initiating inter-organizational arrangements.

A preliminary effort to employ the approach is illustrated in two case studies, one of the state of Wisconsin and the other of the state of Utah. The information provided in the two case studies is limited and sometimes subjective, but does serve to illustrate how the framework may be applied. Dr. Paul concludes this study with some brief comments on a suggested research agenda and possible policy implications.

Paul D. Hood

June 1978

SYNOPSIS

The objective underlying this preliminary case study of inter-organizational dissemination arrangements was to construct a conceptual framework that would be useful for conducting large-scale investigations of state dissemination activities. The dimensions making up the framework were used to organize and analyze information dealing with Wisconsin's and Utah's dissemination arrangements. In some instances, predictions of inter-organizational factors were offered.

The information dealing with Wisconsin was gathered from reports, interviews, personal experiences, and meetings held at Far West Laboratory. Interviewees provided a wealth of descriptive data on a diverse array of dissemination arrangements. The insight of the interviewees into dissemination as a national issue varied a great deal. Anecdotal descriptions were the most interesting and they resulted in some unexpected findings.

The findings of the Wisconsin case study were organized and analyzed in terms of the conceptual framework. The dimensions showed promise of utility for a more comprehensive case study--one that allows for on-site visits and in depth interviews. In this preliminary case study, lack of information constrained the testing of the conceptual dimensions. Nevertheless, some unexpected findings emerged.

The most interesting finding dealt with a dozen or so continuing education agents. These linkage-type agents are organized on a cooperative extension model and they are managed by the University of Wisconsin Extension, the same institution that administers the agriculture cooperative extension. These agents promote extension programs, sell extension services, and sound out the needs of a variety of groups throughout the state. School districts

and teachers make up a large portion of their clients.

The second interesting (but not surprising) finding dealt with the wide variety and number of dissemination arrangements. Each state agency partitions the state to suit its own dissemination needs, i.e., there are extension districts, vocational educational districts, intermediate service unit boundaries, and some agencies that use the boundaries of school districts. There tend to be more than one dissemination program per agency, although the programs are not always viewed in terms of dissemination. In other words, a different vocabulary and the secondary priority accorded dissemination both tended to limit the visibility of inter-organizational dissemination arrangements.

In summary, there was considerable dissemination redundancy which seemed to be functional. However, this judgment could not be confirmed. The conceptual dimensions were useful and they generated ideas and questions which would have been overlooked. By use of the perspective that power and resouces motivate organizations to act, it was possible to predict some consequences of interorganizational arrangements. Such predictive power promises to be useful to formulators of dissemination policy.

Information dealing with Utah dissemination arrangements was gathered from a small number of documents, telephone conversations, and several meetings with a Utah SEA representative. Very little can be concluded from the Utah case study. Descriptions of inter-organizational dissemination arrangements were not sufficient to draw a clear picture of the status of state dissemination.

The case studies are followed by a series of questions for empirical research. The research agenda proposed is aimed at providing an empirical base for making explicit those conditions which influence the performance and the effectiveness of inter-organizational arrangements.

CONCEPTUAL FRAMEWORK

This study attempts to build a general conceptual framework to describe dissemination arrangements. Use of the framework is then illustrated by two case studies of dissemination arrangements in Wisconsin and Utah. At the initial stage of this study, the concept of linkage arrangements which was used led to a uni-dimensional classification scheme for each state. A state could be classified in terms of its general organizational structure, e.g., strong state education agency (SEA) which works through statewide intermediate service agencies (ISAs), or weak SEA counterbalanced by effective ISAs. However, in this study of the arrangements in several states, it became apparent that a multidimensional view of inter-organizational arrangements was needed. A typology of inter-organizational arrangements was constructed which reflected a low-to-high continuum of structure. At the low end, ad hoc inter-organizational arrangements were postulated. At the high end of the structure, continuum were formal inter-organizational arrangements. Then a more complex picture of state arrangements began to emerge. In other words, simple descriptions were not sufficient, but pigeonholing in terms of a simple typology of arrangements lacked explanatory and predictive power. The typology was discarded and a new conceptual framework was developed. This framework draws upon inter-organizational concepts, organizational theory, and literature of organizational networks.

It is important at the outset to distinguish the concept of inter-organizational linkage from individual linkage. The former considers the organization as the unit of analysis, and the latter treats the individual as the unit of analysis. This distinction implies that organizational theory and literature will be used to group and discuss inter-organizational concepts.

Since most inter-organizational theorists have worked outside the educational dissemination research network, little of their work has been applied. Contributing to this lack of application are the facts that inter-organizational studies are in an embryonic state of development and that they are so abstract as to make application to dissemination issues difficult.

Power and Resources

Two major forces serve to drive and direct organizations: power and resources. Organizations strive to increase power and resources, or at least to maintain their power and resources. These two driving forces have a direct bearing on inter-organizational arrangements and they are entwined and associated with dominance, autonomy, and exclusivity.

Dominance. If one organization is able to direct or control another organization, we can say that it is dominant over the other--it has power. This power prevents the loss of resources, or it prevents the other organization from appropriating resources.

Autonomy. If an organization is able to carry out its functions without supervision, control, or outside involvement, then we can infer that is has autonomy. Autonomy helps to prevent criticism from arising over inadequate performance or over differences in ideology. This, in turn, reduces the likelihood of resource or power losses.

Exclusivity. If an organization is unchallenged or unhindered, or has no competition, then we can say that it has exclusivity. The drive for power and resources causes organizations to protect their sources of funds from other organizations. An exclusive domain, either in terms of territory or function, contributes to power and resource stability.

Power helps to defend against other aggressive organizations. Tasks which hinder an organization from maintaining and protecting resource supplies are avoided, as are arrangements with other organizations which have an adverse impact on funds. Predictability and orderliness are correlates to an organization's need to maintain and protect sources of funds (Benson, 1973; Hage and Aiken, 1967; Paul, 1976).

This overview lays a conceptual foundation for introducing dimensions for describing inter-organizational arrangements and strategies. The essential point is that whenever two or more organizations get together, power and resources are in some way involved in the arrangement. Therefore, policy directed at fostering inter-organizational dissemination arrangements should take into account these forces.

Inter-Organizational Dimensions

Benson's (1973, 1975) conceptualization of inter-organizational dimensions provides a refreshing systemization of a highly abstract and evolving area of study. He posits four dimensions for describing inter-organizational arrangements:

Domain Consensus

> Agreement among participants in organizations regarding the appropriate role and scope of an agency.

Ideological Consensus

> Agreement among participants in organizations regarding the nature of the tasks confronted by the organizations and the appropriate approaches to those tasks.

Positive Evaluation

> The judgment by workers in one organization of the value of the work of another organization.

Work Coordination

> Patterns of collaboration and cooperation between organizations. Work is coordinated to the extent that programs and activities in two or more organizations are geared into each other with a maximum of effectiveness and efficiency.
>
> (Benson, 1973, p. 51; Benson, 1975, p. 235)

Domain consensus is influenced by complementarity of organization resources. For example, if two organizations have identical capabilities, specialities, or equipment, then they are natural competitors--they have no functional reason to cooperate. In contrast, two organizations with corresponding strengths and weaknesses receive functional benefits from cooperating. This can be directly applied to practice. For example, an SEA with slack computer time functionally complements an ISA which expends monies doing manual ERIC searches.

Legitimacy is associated with ideological consensus. The involvement of organizations in each other's affairs is affected by the extent to which the involvement is seen as legitimate. This notion can also be applied to practice. For example a local teacher education institution which has close relationship with neighboring school districts is probably viewed as a legitimate source of help. Designing an inter-organizational dissemination arrangement between the teacher education institution and the local schools would have the benefit of previously established legitimacy.

Positive evaluation is influenced by attitudes and stereotypes. For example, practitioners label researchers as esoteric and irrelevant, whereas researchers label practitioners as myopic and ignorant. Corrective programs based on awareness of negative attitudes and stereotypes can help to divert inter-organizational conflict.

Work coordination is influenced by structural variables such as locus of control, rules and regulations, and goal definition. Differences in locus of control can be seen in centralized and decentralized organizations. Differences in rules and regulations can be seen in organizations with rigid and flexible rules. Differences in goal definition can be seen in organizations with dispersed and unified goals (Hall, 1975; Sieber and Louis, unpublished).

The important point is that inter-organizational relationships can be described, understood, and to some degree predicted in terms of these four dimensions.

Benson points out that these four dimensions are ultimately dependent upon political (i.e., power) and economic (i.e., resources) forces. They are "...controlled in the final analysis by more fundamental considerations of resource acquisition and dominance" (Benson, 1975, p. 235).

The implications of this conceptual framework should be clear to the policy formulator considering mandated inter-organizational arrangements or expecting voluntary arrangements to evolve:

- If domain consensus is high, then it is more likely that the inter-organizational arrangement will be successful.
- If ideological consensus is high, then it is more likely that the inter-organizational arrangement will be successful.
- If positive evaluation is high, then it is more likely that the inter-organizational arrangement will be successful.
- If work coordination is high, then it is more likely that the inter-organizational arrangement will be successful.

Correlaries can be posited, such as:

- If resources are complementary, then domain consensus will be positively influenced.

These relationships reflect the difficulty in engineering inter-organizational arrangements. Mandated arrangements force organizational cooperation that

is often subverted due to the absence of one or more of these dimensions. On the other hand, voluntary arrangements often naturally evolve because of the presence of these dimensions. However, the impact of individual dimensions and the explication of the relationships between power and resources on one hand, and the four dimensions on the other, needs further testing.

Strategies for Initiating Inter-Organizational Arrangements

Three strategies account for most inter-organizational arrangements: strategies based on organizational needs, those based on outside alliances, and those based on outside authority and/or funds. An example of the first type of strategy is represented by an organization with complementary resources coupled with one having a scarcity of resources. One organization may have a monopoly on an important input needed by a second organization. In turn, the second organization may have a different resource in short supply. Mutual needs serve to motivate the initiation of an inter-organizational arrangement. An example of the second type of strategy is represented by an organization with close affiliation with one or more powerful outside agencies or with allied agencies. This affiliation tends to create an unequal balance of power which can be used to bring about a beneficial inter-organizational arrangement. Urban school districts may form an association to put pressure on a legislature, or a teacher association may join a powerful national union. These alliances can create beneficial arrangements. An example of the third type of strategy is represented by legislative mandates and/or funds. The legislature may stipulate that state universities must create inservice training arrangements with districts in their vicinity.

Neither universities nor school districts may want the arrangement, but neither organization has more power than the legislature or alternative sources of funds.

These dimensions and strategies provide a framework for describing various inter-organizational arrangements. The next step is to apply these dimensions and strategies to inter-organizational arrangements which deal with dissemination either directly or indirectly. These dimensions are not exhaustive, sophisticated, or associated with years of testing and verification. If they serve to organize descriptions of state dissemination arrangements and if they suggest topics that would otherwise be overlooked, then they will have served their purpose. These dimensions provide fertile soil for enlarging our understanding of inter-organizational arrangements. A research agenda, at the conclusion of the case studies, suggests a few topics for investigation. Table 1 illustrates how the dimensions will be used to describe dissemination arrangements in Wisconsin and Utah (see following page).

Table 1

DIMENSIONS AND STRATEGIES FOR DESCRIBING

INTER-ORGANIZATIONAL ARRANGEMENTS

STATE ORGANIZATIONS	INTER-ORGANIZATIONAL DIMENSIONS				STRATEGIES		
	Domain Consensus	Ideological Consensus	Positive Evaluation	Work Coordination	Need Based	Alliance Based	Authority Based
Dissemination Arrangements Within SEA							
Dissemination Arrangements Between SEA/LEA							
Dissemination Arrangements Among SEA/ISA/LEA							
Dissemination Arrangements Among LEAs							
Dissemination Arrangements Among SEA/University/LEAs							
Dissemination Arrangements Between University/LEA							

CASE STUDIES

The two case studies presented here are neither comprehensive nor based on site visits. The perspective, being that of the state education agency, is therefore biased toward that agency. In addition, sources of information, knowledge of arrangements, and the author's experiences originate from the SEA. Although this is a major limitation on the one hand, it is also a strength on the other. It is a strength for four reasons: (1) federal initiatives for statewide dissemination to elementary and secondary personnel are likely to be centered in SEAs; (2) recent NIE programs for building dissemination capability are centered in SEA dissemination units; (3) SEAs have legal responsibility for assisting LEAs to improve education; and (4) competency-based education legislation has put pressure on SEAs to assist poorly performing schools, and one improvement alternative is more effective dissemination.

Nevertheless, the limitations of writing a case study based on secondary data and several telephone conversations are all too real. The Wisconsin case study is based on the author's experience as a member of the planning bureau in the SEA and experiences as a graduate student at the University of Wisconsin (U. W.) at Madison. Interviews via telephone were conducted with representatives of the SEA, U. W. extension system, and the Board of Vocational, Technical, and Adult Education. Several background documents were provided by the SEA. Clearly, a comprehensive and accurate picture of Wisconsin will require site visits, in-depth interviewing, and first-hand observation.

The Utah case study suffers from uneven reporting due, in part, to the difficulty in locating dissemination informants. The bulk of disseminating

descriptions center on Utah State University. Although a number of dissemination documents dealing with the Utah SEA were made available, it was extremely difficult to form a clear picture of the stutus of internal SEA dissemination arrangements. As with Wisconsin, a comprehensive and accurate view of Utah will require site visits, in-depth interviewing, and first-hand observation.

Wisconsin

Background

Wisconsin's population in the 1970's stood at 4,609,000, with the urban/rural split evenly balanced. Per capita income in 1975 was $5,627, compared to the U. S. average of $5,834. Wisconsin ranked 16th nationally in terms of total earned income with manufacturing contributing the largest share.

Wisconsin ranks 34th nationally in the number of state and local government employees, and ranks 16th in terms of government employees' earnings. In 1975, Wisconsin was seventh among the states in per capita revenue from all state taxes ($464.69). In 1976, more than one-half of Wisconsin's state expenditures went to education, and Wisconsin spent more than the national average on education. Wisconsin ranked 18th nationally in state and local government expenditures and eighth in total amount of state payments to local units of government. Federal aid to Wisconsin in 1976 totaled $1.02 billion, half of which was for human relations and resources, followed by education. In 1975, Wisconsin ranked 39th among the states in per capita federal aid to state and local government ($199.50 versus the U. S. average of $220.79).

Wisconsin ranks 11th in the nation in total expenditures for education, eighth in higher education expenditures, and 15th in state aid to local government expenditures for education. Whereas the state ranks 26th nationally in personal income, it ranks 13th in education expenditures per capita. Wisconsin's effort to support education is above the national average; education is regarded as an important social value for Wisconsinites. The state's high school completion percentage is above the national median.

Educational Systems

There are essentially three separate legal entities which make up Wisconsin's educational system: the Wisconsin Department of Public Instruction (DPI), responsible for public elementary, secondary, and special education and for public and school libraries; the Board of Vocational, Technical, and Adult Education (VTAE), responsible for post-secondary vocational education; and the University of Wisconsin (U.W.) system, responsible for higher education. These three entities are structured without any overarching coordinating body outside the state legislature. There is no state board of education or comparable non-legislative body involved with inter-agency educational policy and governance. The chief state school officer does sit, however, on the Board of Regents of the University of Wisconsin and on the Board of Vocational, Technical, and Adult Education. By and large, cooperative efforts among the three entities are irregular, infrequent, and of short duration.

Department of Public Instruction

The Department of Public Instruction (DPI) is under the direction of the State Superintendent, an office created by the state constitution in 1848. The State Superintendent is elected in a nonpartisan spring election for a term of four years. The DPI is charged with the responsibility of providing direction and supervision of public elementary and secondary education. This responsibility is implemented through: (1) providing professional supervision and consultation; (2) supplementing local tax resources with state funds to assure equal educational opportunity; (3) assisting handicapped children to meet their potential; (4) improving curricular and school operations through research and development; (5) providing guidance and counseling support;

(6) developing school and public library resources; and (7) coordinating and administering federal aid to education. The DPI is composed of five divisions; an organization chart is depicted in Figure 1 on the following page. There are approximately 205 professional staff, excluding the residential schools for the blind and deaf.

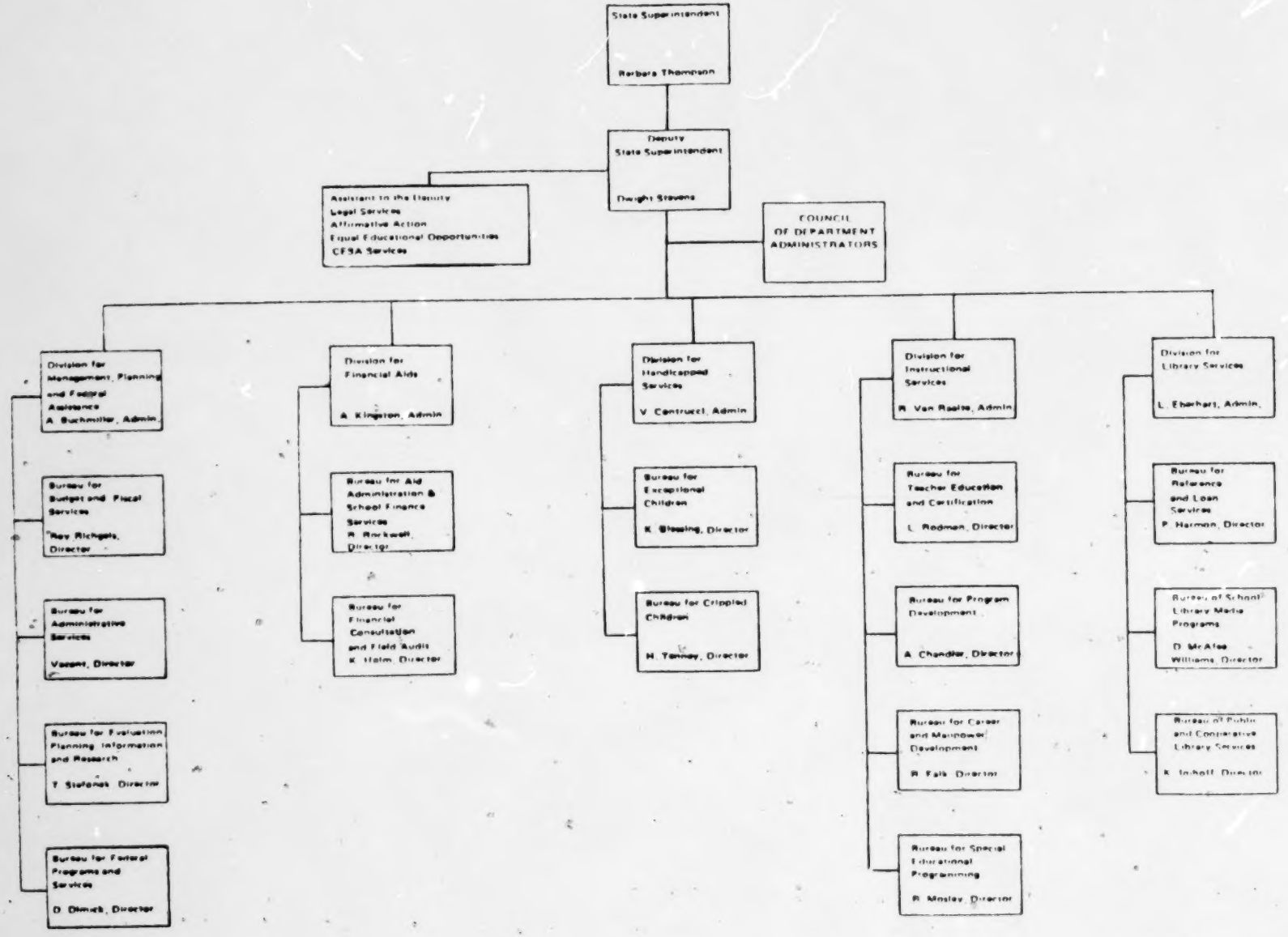
One of the most significant and interesting developments in Wisconsin's education system is the Pupil Assessment Program. This assessment program authorized by the legislature in 1971: (1) uses a random sample of pupils; (2) uses criterion-referenced instruments; (3) does not release data so that schools or districts could be compared; and (4) provides for assistance from DPI in the implementation of local assessments. In 1975, the objective of providing local school districts with technical assistance in utilizing the results of the assessment on a voluntary basis was adopted. These volunteer districts are referred to as LEAPP districts (Local Education Agency Piggyback Project). Six districts were involved in the 1976 LEAPP option and 38 were involved in 1977. More than 100 applied for participation. Clearly the DPI is not staffed or funded to respond to all the districts requesting technical assistance.

Board of Vocational, Technical, and Adult Education

The Board of Vocational, Technical, and Adult Education (VTAE) establishes policy for the direction of vocational, technical, and adult education. Supervision of curriculum standards and of personnel qualification standards is achieved through the control of federal and state funds. VTAE is concerned with offerings in post-secondary vocational and technical education and adult education, including adult basic education, human resources training, job skill improvement, apprenticehip-related training, collegiate transfer, some continuation programs, and a number of allied educational activities.

Figure 1

ORGANIZATION OF THE WISCONSIN DEPARTMENT OF PUBLIC INSTRUCTION



November 30, 1977

There are 15 VTAE districts serving the entire state. These districts do not coincide with the 19 Cooperative Education Service Agencies (CESAs) which serve elementary and secondary schools. More than 355,600 people were enrolled in the VTAE educational system in the 1975-76 school year. (See Figure 2 on the following page for an organizational chart of VTAE.)

University of Wisconsin System

The University of Wisconsin is composed of 13 universities, 14 two-year centers, and an extensive extension program; 143,000 students were enrolled in the University of Wisconsin system in the 1976-77 school year. The Extension enrollment has increased by more than 100 percent over the past five years to 272,800. The Extension is involved with the development of television programs and the operation of a television station. Television media have been highly successful. (See Figure 3 for an organization chart of the University of Wisconsin system.)

Elementary/Secondary Schools

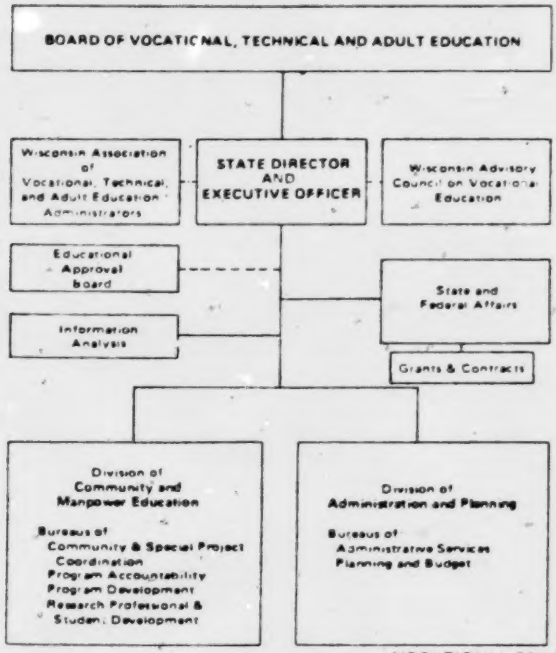
Wisconsin has 436 school districts. Forty years ago there were more than 7,000 districts. The number of districts per county ranges from a high of 21 to a low of one. More than 39,000 of Wisconsin's 57,400 public school teachers have bachelor's degrees and 17,400 (30 percent) hold advanced degrees.

The majority of Wisconsin's school districts are either small or rural. Seventy-five percent have fewer than 2,000 students and only 12 have more than 10,000 students. Table 2 shows a distribution of enrollment size by district for the 1977-78 school year.

The 1977-78 public school enrollment stood at 917,863 pupils, and there were 57,408 professional staff. The Milwaukee school district accounts for more than 21 percent of the total state enrollment (191,192 pupils) and more than 12 percent of the professional staff (6,860). Only five districts have

Figure 2

BOARD OF VOCATIONAL, TECHNICAL AND ADULT EDUCATION


BOARD OF VOCATIONAL, TECHNICAL AND ADULT EDUCATION
Wisconsin Association of Vocational, Technical, and Adult Education Administrators
STATE DIRECTOR AND EXECUTIVE OFFICER
Wisconsin Advisory Council on Vocational Education
Educational Approval board
Information Analysis
State and Federal Affairs
Grants & Contracts
Division of Community and Manpower Education
Bureau of
Community & Special Project Coordination
Program Accountability
Program Development
Research Professional & Student Development
Division of Administration and Planning
Bureau of
Administrative Services
Planning and Budget

VOCATIONAL EDUCATION

Figure 3

ORGANIZATION OF THE UNIVERSITY OF WISCONSIN SYSTEM

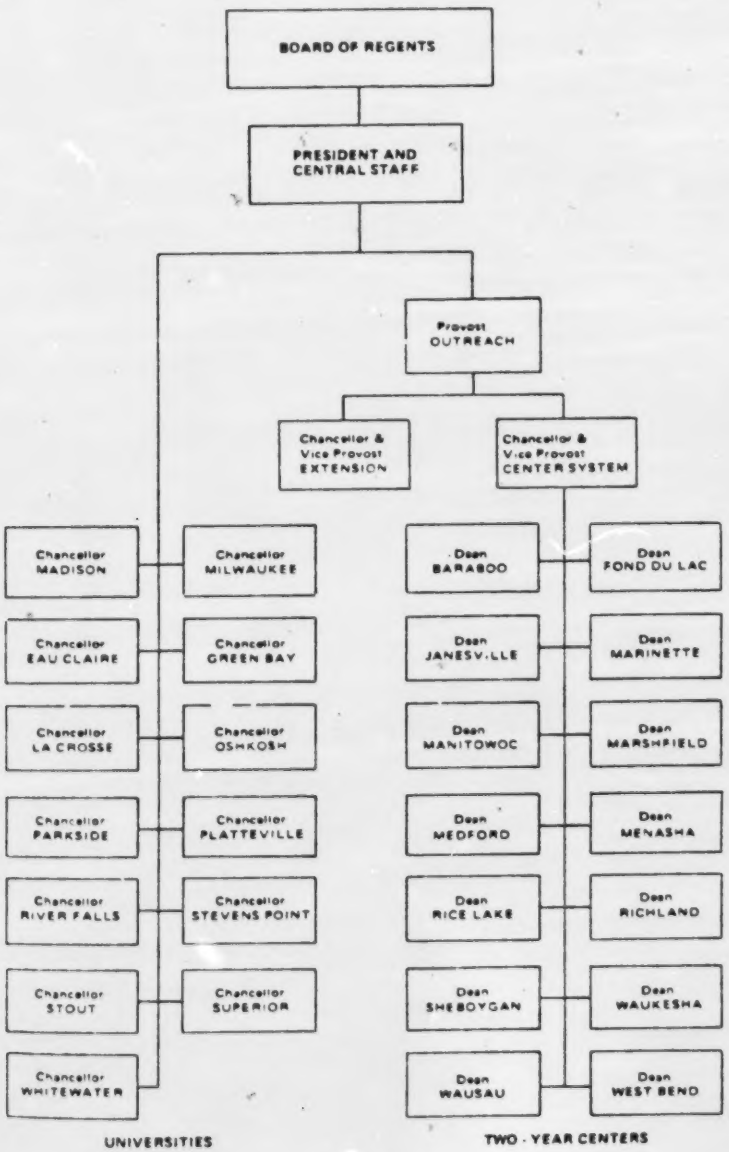


Table 2

ENROLLMENT SIZE BY DISTRICT (1977-78)

ENROLLMENT SIZE	NUMBER OF DISTRICTS	PERCENT OF TOTAL DISTRICTS
10,000 - +	12	2.8
5,000 - 9,999	15	3.4
4,000 - 4,999	15	3.4
3,000 - 3,999	15	3.4
2,000 - 2,999	49	11.2
1,000 - 1,999	120	27.6
500 - 999	129	29.6
UNDER - 499	81	18.6
T O T A L	436	100.0%

Source: Wisconsin Department of Public Instruction, Information Bulletin #1, December, 1977.

minority enrollments numbering more than 1,000 students and these districts account for more than 78 percent of the total state minority enrollment.

Wisconsin's Intermediate Service Agencies

In 1957, a proposal was submitted to the state legislature for a system of intermediate districts. However, local administrators viewed the proposal as a state-imposed educational superstructure. The proposal failed. In the same year, a study was commissioned to investigate the role of intermediate service agencies and the problem of Wisconsin's obsolete county offices. The study recommended the creation of intermediate units and an end to county offices. A second bill to establish intermediate units was introduced into the legislature, but it failed to overcome opposition from local educators. In 1959, the Wisconsin Association of School Boards came out in support of intermediate units, but only for units with no mandated functions. Four additional years of study and committee meetings resulted in the successful passage of a bill to create intermediate units. The statute authorizing the Cooperative Educational Service Agencies stated that the CESAs were created "as a convenience for local districts in cooperatively providing such programs as research, special student classes, data collection, processing, and dissemination, in-service programs, and liaison between the state and local school districts."[1] In 1965, the CESAs were officially instituted and the 103-year history of the county superintendency was ended.

The statutory authority of the CESAs is clearly subservient to the local districts. The CESAs are voluntary service organizations; districts are not obligated to participate in any of the CESA services. In addition to the responsibility to serve LEAs, CESAs are also responsible for district

[1]Wisconsin Statutes, Section 116.01

recognition. This dual role frequently results in conflict. Small districts which frequently have program deficiencies are encouraged to contract for shared services. These same districts are reviewed by the CESA as candidates for consolidation.

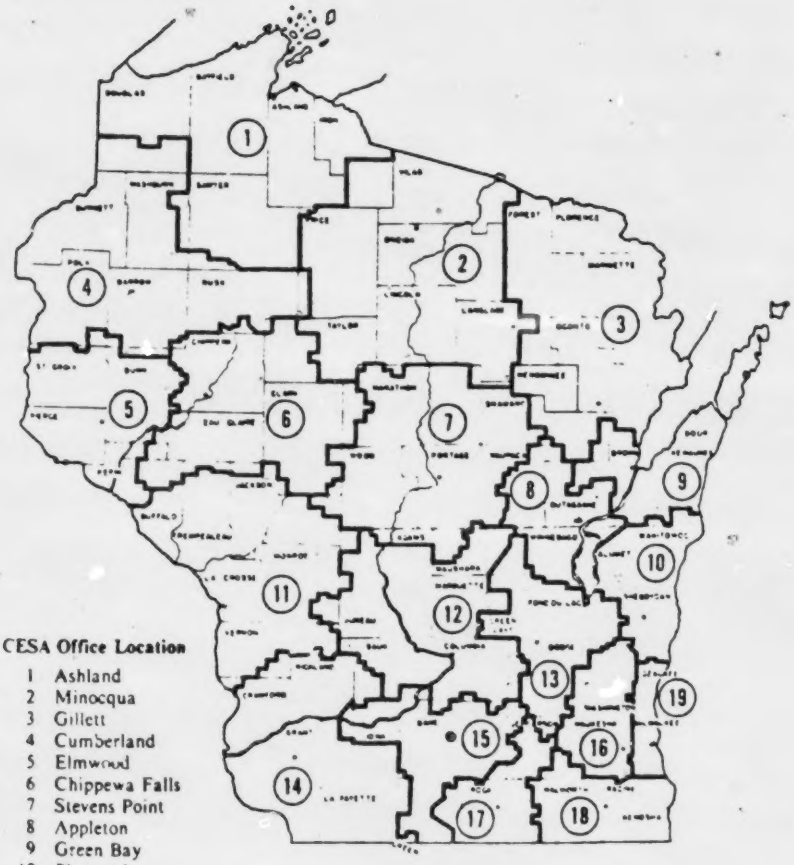
The CESAs cannot levy taxes. Their base administrative support of $41,700 per year is provided by the state. Three CESAs serve as regional computer centers. Each CESA coordinator is appointed for a three-year term by a Board of Control made up of LEA representatives who also serve as local school board members. The coordinator is accountable to this body.

The resistance that reformers encountered in creating the CESA structure is explained in part by a firmly entrenched belief in local control of education and the concomitant lobbying strength of the Wisconsin Education Association, Wisconsin Association of School Boards, and the Wisconsin Association of School District Administrators. Local school districts in Wisconsin strenuously guard their autonomy and are extremely sensitive to any state initiatives which might diminish their autonomy. The state, in turn, is sensitive not to appear overly involved in local affairs or aggressive with respect to creating structures which impinge on local autonomy. This stance is reinforced by the fact that Wisconsin's chief state school officer is elected by popular vote. Being sensitive to local values and to the traditional SEA/LEA relationship is a key factor in incumbent re-election. Recent state and federal legislative actions have made this service/leadership role more difficult to maintain, however, as more emphasis is placed on supervision, regulation, and compliance.

This account of the creation of the CESAs illustrates the strength of local control and the corresponding position of the DPI. In addition, the CESAs can be accurately portrayed as creatures of the local schools and not of the state. Dissemination arrangements involving the CESAs must take into account their history and statutory powers. Figure 4 depicts the 19 CESAs.

Figure 4

COOPERATIVE EDUCATIONAL SERVICE AGENCIES



CESA Office Location

1 Ashland
2 Minocqua
3 Gillett
4 Cumberland
5 Elmwood
6 Chippewa Falls
7 Stevens Point
8 Appleton
9 Green Bay
10 Plymouth
11 LaCrosse
12 Portage
13 Waupun
14 Fennimore
15 Madison
16 Waukesha
17 Janesville
18 Burlington
19 Milwaukee

WISCONSIN DEPARTMENT OF PUBLIC INSTRUCTION
Dr. Barbara Thompson, State Superintendent

Inter-Organizational Arrangements

In this section of the case study, descriptions of dissemination arrangements involving various organizations in Wisconsin are described. The descriptions merely sketch an outline of the many arrangements which exist. Some arrangements are of short duration, informal, and invisible to outsiders. Others are institutionalized, formal, and visible arrangements proudly displayed for inspection. It is important to repeat here that these descriptions carry the bias of a former DPI employee who was assigned to the planning, research, and evaluation branch. Countering the obvious bias is the equally (and in my opinion) more compelling advantage of first-hand insights into the inner workings of a state bureaucracy. Nevertheless, someone associated with an instructional unit involved with dissemination would undoubtedly have a different view of the department's dissemination efforts and efforts in other agencies.

The presentation of state dissemination arrangements is organized to coincide with Table 1. The first descriptions involve dissemination arrangements within the DPI. Although these are not inter-organizational arrangements between the DPI and other organizations, they describe relationships between DPI organizational units which frequently act like separate organizations.

Dissemination Arrangements Within the DPI

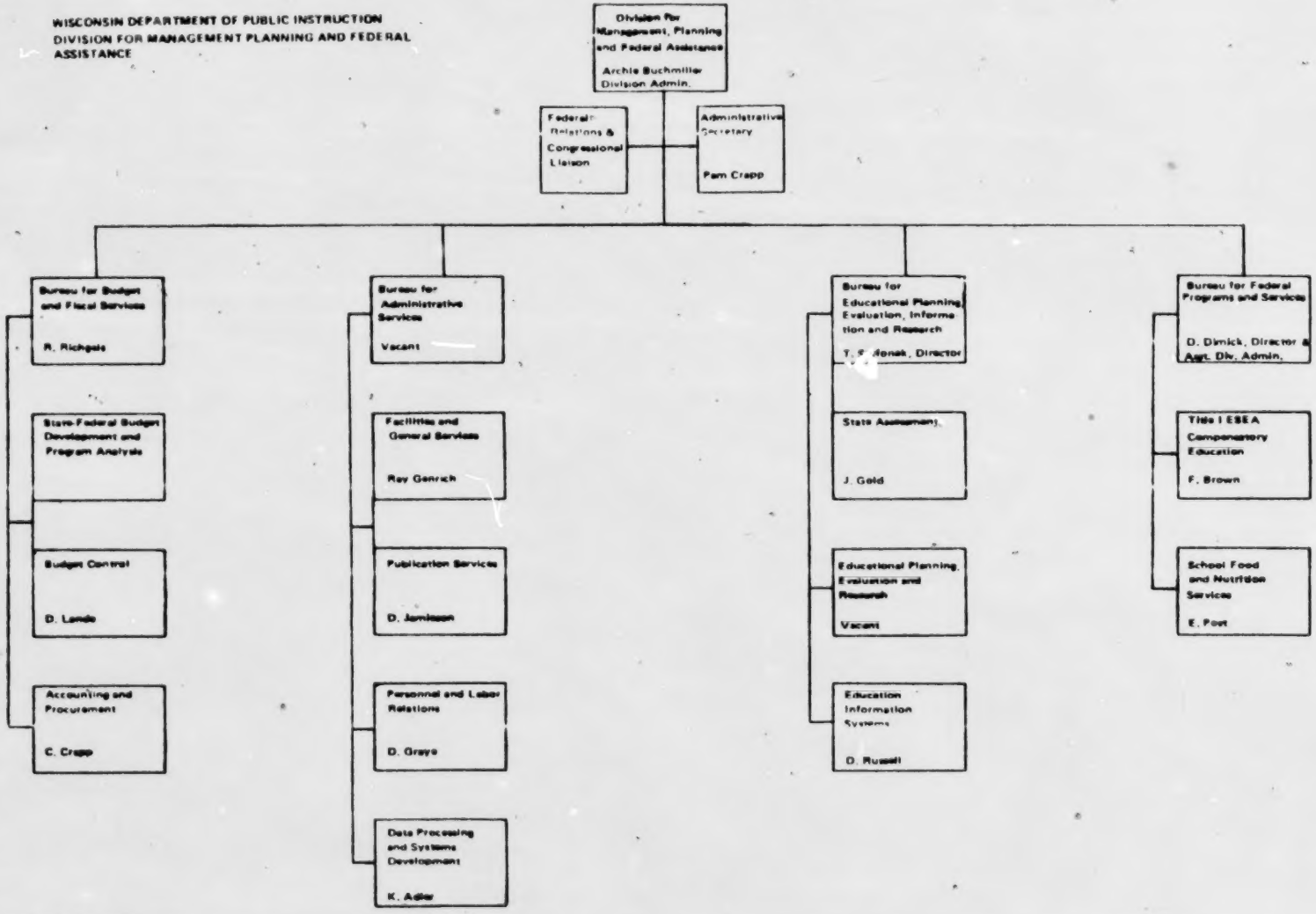
The DPI first gave explicit recognition in the late 1960s to the need for an organizational unit responsible for collecting, analyzing, and disseminating information. A branch for Planning, Research, and Evaluation was established by the driving force of the Deputy State Superintendent--a savy, aggressive, professional educator with a doctorate in educational

administration. He envisioned a small group of researchers, planners, and evaluators who would document budget requests, operate a planning, programming and budgeting system, carry out small-scale research studies, and generally act as a staff of trouble-shooters. It was no small feat to establish the branch; if it were not for the fact that the Deputy State Superintendent enjoyed the confidence of the Chief State School Officer, it is unlikely that the branch would even have been established. It is currently a bureau within the Division for Management, Planning, and Federal Assistance.

During the early 1970s, the branch tried to consolidate planning, research, and evaluation functions which were conducted throughout the agency. Consolidation was unsuccessful, for the most part. The one major consolidated function was that of data collection and reporting, which eventually became the Education Information Section. Personalities, internal politics, and turf disputes were competing forces behind the transfer of information systems, as well as functional consolidation goals. The Information Systems Branch is of interest here because that is where DPI's dissemination capacity building grant is located. It is the only organizational unit capable of developing a statewide perspective toward the importance of dissemination. The Chief of the Education Information Section formerly served as the director of data processing. As such, he was responsible for operating the in-house computer, collecting data on the status of education in the state, and providing summary statistics to legitimate users. The Education Information Section is located within the Bureau for Educational Planning, Evaluation, Information, and Research. A staffing chart of the Division for Management, Planning and Federal Assistance is shown as Figure 5 on the following page.

Figure 5

STAFFING CHART: DIVISION FOR MANAGEMENT, PLANNING, AND FEDERAL ASSISTANCE



The Bureau for Educational Planning, Evaluation, Information, and Research prepares and disseminates compact reports on topics of current educational interest. Some of the reports summarize original research, but most are syntheses and interpretations of research and policy issues. The titles of a sample of reports prepared and disseminated by the Planning Bureau are listed below:

- Competency-Based Education: Issues and Implications
- Viewpoints of Local Board Presidents: Educational Problems, Achievements, and Challenges
- A comparison of the Mathematics Achievement of Males and Females
- Educational Planning and Evaluation: A Local District Perspective

In addition to topic-oriented information, the Bureau is involved with statistical reporting and ERIC searches through the Information Systems Branch. The Education Information Section is involved with two kinds of information: state statistics and resource files. The statistical information collected and disseminated by the Branch is a well-established function, and great pride is taken in the accuracy and timeliness of the statistics. Summary statistical reports are published and disseminated to administrators. These reports are numbered and called "Information Series." A sample of Information Series titles appears below.

Enrollment by Size
Student Dropout
Minority Enrollments
Enrollments by CESA
12th Grade Enrollments
Pupil/Teacher and Pupil/Total Staff Ratios
Teaching Days
School District Census
School District Enrollments Alphabetical
School Staff Ethnic Categories

The second set of information, centered in the ERIC Files, is called WIRE (Wisconsin Information Resources for Education). Computer searches of

WIRE have been offered by the Education Information Section since 1973. The volume has not been great, however. In 1976 there were 250 requests, half of which originated within DPI, the other half coming from the field. The WIRE data base is presently being expanded with support from Wisconsin's $109,413 Dissemination Capacity Building Grant.

Dissemination activities occur throughout the DPI. Two programs have extensive dissemination experience: handicapped services and career education. These programs operate independently from the Education Information Section. A more recent dissemination effort, located in the Division for Instructional Services, deals with innovative instructional programs, including National Diffusion Network products.

There are few intra-organizational dissemination arrangements involving the Education Information Section and the other dissemination programs. Domain consensus is low within the DPI over the scope and role of a centralized dissemination unit. There is little agreement over the most effective organizational design for dissemination, i.e., should it be centralized and respond to requests, should it be decentralized and initiate requests? There is little ideological consensus. Staff trained in information processing have different views, biases, and solutions from those trained in various curriculum subject fields. The former stress process roles and are interested in information retrieval and dissemination. In contrast, the latter stress content-oriented approaches and are interested in technical assistance and user need-sensing activities. Staff from separate organizational units within the DPI are likely to judge the dissemination effectiveness of their unit as higher than that of another unit. Consequently, positive evaluation is low. The extent of work coordination

is low with respect to dissemination activities between divisions or between certain bureaus within divisions.

For these reasons there are few instances where units voluntarily arrange joint dissemination efforts. However, even if units have complementary needs that could be filled by a joint effort, they still may not cooperate. This failure occurs because power and resource shifts may result from joint efforts. Mandated joint programs overcome initial barriers but these initiatives cannot overcome conflicts which emerge at the informal level. Although mandated initiatives have limitations, the DPI has mandated new organizational structures to bring about change and cooperation. Usually an organizational unit is shifted or created. This is one reason why reorganizations regularly occur.

Dissemination Arrangements Between DPI/LEAs

Considerable dissemination activities occur between the DPI and LEAs. In addition to the established publication program and the Information Systems Branch bulletins, subject-matter consultants make site visits, conduct workshops, and respond to specific subject-related requests. Federal programs administrators communicate regularly with LEAs. Their main concern is with changing rules and regulations or with monitoring budgets, in contrast to R&D-based or innovation-related dissemination. Apart from the subject specialists, R&D-based and innovation-related dissemination are primarily conducted through ERIC searches and through the activities of the NDN State Facilitator. Most formal dissemination activities within the elementary/secondary system fall into the DPI/LEA pattern, i.e., not through intermediary organizations such as the CESAs.

Dissemination Arrangements Among DPI/CESA/LEA

Wisconsin's Dissemination Capacity Building grant is centered on developing resources and a system for linking DPI, CESAs, and LEAs. The resource base will include national, state, and regional education programs and practices, legislative information, and directories of human and material resources. The resource base is called WIRE (Wisconsin Information Resources for Education). Directories of existing resources housed in the DPI and in Wisconsin libraries will also be incorporated into WIRE. The CESAs are envisioned as the primary structures for interfacing with users. The intent of the grant is to link all the CESAs to WIRE's data base through six to nine regional CESA centers. This long term effort--with a goal of state-wide dissemination coverage is predicted to require at least five years.

In terms of the four inter-organizational dimensions, the DPI/CESA/ LEA arrangement is highly speculative. As an emerging arrangement it will undoubtedly produce a number of conflicts on one hand and unexpected benefits on the other. Domain consensus will need time to develop. This challenge will be easier if CESAs receive direct support for dissemination activities from the DPI in contrast to convincing LEAs to support CESA-based dissemination. Ideological consensus will vary according to the orientation of CESA, LEA, and DPI staff: specialists versus generalists, process-versus subject-centered. Ideologies can also be centered around advocates of responding to requests versus advocates of user-centered need sensing. Positive evaluation will probably be high since there are few competing dissemination arrangements to criticize. Work coordination will probably be high at the initial stages of the development of the CESA/DPI/LEA network, but coordination will decrease as the network matures and develops independence.

The DPI/CESA/LEA arrangement is one of the most promising arrangements for statewide educational dissemination in Wisconsin. However, neither LEA administrators or CESA administrators view dissemination as a pressing school need;* therefore, fiscal support of the network will have to come from external sources. If support is not provided, then the arrangement will probably require statutory authority in order to survive.

Dissemination Arrangements Among LEAs

Surely a large number of dissemination activities occur among LEAs. These are invisible arrangements for the most part. Exceptions are association-sponsored efforts such as statewide and regional meetings of the elementary principals association, high school superintendents association, school boards association, and various curriculum associations. A second type of visible LEA arrangement is that found among urban districts. Once a month, administrators of Wisconsin's largest urban districts meet to share ideas and develop strategies. However, most inter-district dissemination is informal, invisible, and therefore beyond documentation. Such arrangements usually have high domain consensus, as well as ideological consensus. Positive evaluation may vary according to the capacity of the participants. Work coordination is probably low since participants are equal and there is no formal authority or central coordinating body. Inter-LEA arrangements reflect a need-based strategy.

*See "Education Planning and Evaluation: A Local District Perspective," Wisconsin Department of Public Instruction, Information Services, Vol. 5, No. 1, June 1976, and "Cooperative Education Service Agencies: the CESA Coordinators' Perspective, "Wisconsin Department of Public Instruction, Information Series, Vol. 6, No. 2, December 1976. Both are by Thomas Stefoneck.

Dissemination Arrangements Among DPI/University of Wisconsin/LEAs

Probably the most visible DPI/U.W./LEA arrangement is centered on the dissemination of Individually Guided Education (IGE). In 1968, the DPI and the Wisconsin Research and Development Center began working together to disseminate IGE throughout the state. The R&D Center and the DPI developed a book and accompanying videotapes for use in implementing IGE by state education departments and teacher education institutions. The R&D Center supported one-half of a professional position at the DPI for IGE activities. (The initial DPI consultant later became the state superintendent.) Funding for the position fluctuated from year to year. The arrangement ended in 1977, and the then IGE consultant became the NDN State Facilitator.

The four dimensions for inter-organizational arrangements can be applied to the DPI/Wisconsin R&D Center arrangement. Domain consensus was high, due in part to the existence of a formal agreement between the DPI and the R&D Center. The role and scope of the DPI with respect to IGE activities was made explicit. Ideological consensus, however, probably varied according to the perspectives and values of the various staff members who filled the IGE consultant position. For example, there may have been differences of opinion concerning the organizational capacity of schools to adopt IGE, or differences in viewpoint as to the best strategies for entering a school system. Positive evaluation probably varied from year to year, depending on staff changes in each agency. Degree of agreement over dissemination strategies influences the degree of positive evaluation. If one agency disagrees with the assumptions underlying the strategies used by the other organization, then it is likely that judgments of performance will be low. Work coordination between the DPI and the R&D Center was made easier by the fact that the respective office buildings were located within walking dis-

tance of each other. Nevertheless, not all state IGE dissemination activities were channeled through the DPI. There were too many state activities for one half-time consultant to coordinate adequately, and the operating procedures of a university-based R&D Center did not lend themselves to strict coordination. The DPI/R&D Center inter-organizational arrangement strategy was based on mutual need. There were complementary resources, viz., the DPI gave state legitimacy to IGE. This was important on two counts: (1) it helped the R&D Center gain entry into school districts, and (2) it helped school districts in their annual quest for federal monies to support new programs. The more IGE implementation efforts which received support, the greater the likelihood of IGE spreading. The DPI, in turn, received support for one-half of a professional position--a needed resource.

Dissemination Arrangements Between University of Wisconsin/LEAs

Three University of Wisconsin dissemination activities are summarized here. The first deals with the Wisconsin Occupational Information System (WOIS), the second with faculty outreach activities, and the third with U. W. Extension.

The Wisconsin Occupational Information System is a retrieval system, either computerized or manual, for informing users about various occupations (in terms of availability, entrance requirements, and suggested curricula). School systems, university campuses, vocational rehabilitation offices, and Comprehensive Educational Training Agencies subscribe to the system. A terminal or files are set up and users are encouraged to query WOIS for up-to-date career information. Approximately 200 school districts subscribe to WOIS. Statewide, there are 375 WOIS sites; approximately half use the computer-based version of the system. Costs range from $160 to $450 per site per year for the manual version and from $450 to $4,000 per site per

year for the computer-based version. The WOIS budget is approximately $350,000 a year. Inservice training, marketing, and linking functions are provided by 11 FTE professionals who work out of the Public Service Employment Division. These individuals began fulfilling a linking role in the Fall of 1977. During 1977, some 50-75,000 users made use of WOIS. Estimates for 1978 are for 150,000 individual users. The inter-organizational arrangement exemplified by WOIS requires very little coordination between the districts and U. W. Information is updated regularly without troubling the districts.

Domain consensus is high--the institutions buy into the system. Ideological consensus is high since the institutions willingly opt for the system. If evaluation of WOIS were low, then the institutions would probably discontinue the service. The inter-organizational strategy is based on mutual need--the institutions receive timely information and U. W. receives funds to support and update its system.

The second example of dissemination arrangements between U. W. and LEAs is centered within the school of education. As a land grant institution, U. W. is committed to providing service to the community. This commitment is usually actualized by the school of education in terms of: technical assistance, general advice-giving, inservice activities, and specific trouble-shooting. A second major source of faculty-LEA dissemination is centered on preservice and continuing education courses. Many new ideas, products, and R&D informational resources are disseminated through formal instruction. A third major arrangement is centered on education institutes and laboratory schools, which are usually established for research purposes but which nevertheless result in dissemination. An example of a faculty/LEA arrangement is typified by the IGE network of elementary schools near Eau Claire. The

school of education at U. W. Eau Claire must supervise student teachers. A few faculty members interested in IGE combined student teacher supervisory activities with technical assistance activities for IGE schools. Student teachers are placed in IGE schools so that technical assistance can be combined with supervision all in one site visit. In this way, the technical assistance is supported by the legitimately-budgeted activity of student teacher supervision. However, this inter-organizational arrangement is not without discord. Domain consensus often acts as a barrier to cordial U. W./ LEA relations. Principals often resent intrusions by "academics." Organizational autonomy is threatened--the power of the principal may be diluted by the frequent visits of a recognized "authority" on IGE. Ideological consensus may be low, especially if the host schools are having trouble implementing the instructional and/or organizational components of IGE. Evaluation of the arrangement will be high as long as the parties are satisfied and respect each other, regardless of the quality of the products associated with the arrangement. However, it is rare in education for local schools and universities to respect each other. Work coordination probably varies in terms of individual faculty, since there is little institutionally-imposed coordination.

For the most part, the arrangement is based on mutual needs--schools receive technical assistance at no cost and faculty are able to supervise student teachers and be instrumental in a major education change. This involvement in a major change effort can bring about peer and institutional recognition. In addition to intrinsic need satisfaction as a motivating force for faculty involvement, monetary inducements may also be involved. When districts pay for faculty services, a released-time arrangement usually results. This enables faculty to spend more time at schools. As public

employees, faculty at U. W. are not allowed to receive consulting fees for services they are supposed to provide as part of their jobs.

The third example of dissemination arrangements between U. W. and LEAs is centered within the university's extension system. The extension system has approximately 1,000 professional staff members and hundreds of ad hoc lecturers. In view of federal interest in adaptations to the cooperative extension model, Wisconsin's extension system is an appropriate target for in-depth study. More than 10 years ago the cooperative extension model was adapted in order to reach a broad state audience. The analog to the country extension agent is called the continuing education agent. The analog to the country office consists of the various state university campuses, particularly Madison and Milwaukee.

The extension offers credit and non-credit courses, workshops, and conferences. There are seven extension districts partitioning the state. Each district has a district administrator. The continuing education agents report to a district director and to a program specialist located at one of the university campuses. Half the agents have doctoral degrees. They are less specialized than extension professors. The agents are usually assigned two or three broad subject areas such as communication, business, education, or health sciences.

Extension/LEA contact occurs regularly. For example, either a principal or a superintendent initiates requests for extension service or the continuing education agent solicits requests. Services are varied. They may include an on-site visit by an extension professor, a semester-long credit course, a week-long workshop, or the conduct of a special study. The agents funnel education-related requests to the extension's director for education. He, in turn, clarifies the needs of the requester and arranges appropriate

services. The resources of the entire extension and U. W. systems can be called upon. Sources of funding for extension services include tuition fees paid by teachers, district inservice budgets, and federal grants, or the cost can be absorbed by the extension.

In addition to the outreach provided by the continuing education agents, the extension makes use of statewide television and radio stations and a comprehensive education telephone network. The telephone network has outlets in every county in the state. It allows for group discussions to be carried out with specialists in a variety of fields, including medicine, law, education, and business. Hundreds of programs are offered annually over the telephone network. Teachers have been steady participants.

In summary, it appears that Wisconsin has an extensive extension program serving multiple publics statewide. The continuing education agents are modeled after the agricultural extension agents. Both are located within the extension system. Wisconsin has a long tradition of state-supported extension services. The organizational structure supporting the continuing education agents deserves in-depth study. In terms of the inter-organizational dimensions introduced earlier, the extension system appears to have high domain consensus which could be due to its long history in Wisconsin. Ideological consensus and positive evaluation of extension services also appear to be high. The work of the continuing education agents appears to be coordinated by education district directors and by subject specialists. The inter-organizational strategy underlying extension services appears to be based on mutual need.

Dissemination Arrangements Between Vocational, Technical, and Adult Education (VTAE)/LEAs

The Board for Vocational, Technical, and Adult Education has created several arrangements for disseminating information to post-secondary vocational schools. There are 16 post-secondary districts in Wisconsin. Each district has an R&D coordinator responsible for a variety of R&D-associated activities, including dissemination. At the state level there is a Research Coordinating Unit (RCU).

Dissemination activities conducted by the RCU center, for the most part, on forwarding reports to the voc ed districts, publishing a weekly bulletin and an annual newsletter, conducting ERIC searches, and duplicating microfiche. Workshops are occasionally offered; for example, the use of terminals to conduct ERIC searches was the topic of a series of workshops a few years ago. Curriculum specialists assigned to the VTAE Board conduct workshops throughout the state; however, these are not RCU-sponsored activities.

The Vocational, Technical, and Adult Education Board has two internal information systems: one for curriculum materials and exemplary programs and the other for research reports. The latter is administered by the RCU.

The RCU conducts some 100-200 ERIC searches a year. Until recently, the RCU conducted 1-2 custom searches a week, usually over the telephone. This service has stopped due to staff changes. Three or four districts now have their own portable terminals which can be used for conducting literature searches. In addition, each district has a full-time librarian.

A need-sensing arrangement has been developed for determining the research needs of the 16 districts. The Local Vocational Administrators Association meets 3-4 times per year with RCU staff to identify research priorities,

share in the developments of ongoing studies, an foster cooperation for future studies.

In summary, the RCU director observed that more diffusion and utilization activities are needed, but with only two professional staff members it was difficult to do more than respond to requests.

In terms of the four inter-organizational dimensions introduced earlier it is difficult to infer the degree of domain consensus, ideological consensus, evaluation, or work coordination. One would have to interview staff in the 16 vocational education districts to learn of any misperceptions as to the role of the RCU in dissemination. Work coordination hardly seems an issue here since the RCU maintains its own information system and distributes reports in a fairly standardized fashion. The strategy underlying VTAE arrangements for dissemination seems to fall between one of authority and one based on need. The former represents state and federal requirements to distribute reports and the latter corresponds to requests arising from the field. The most potentially interesting dissemination issue involving VTAE is the relationship between curriculum specialists and the RCU. One guess is that the relationship is similar to that found in the DPI between the Information Systems Branch and the subject specialists, i. e., little interdependence or interaction.

Summary

We can infer, based on the limited scope of this case study, that Wisconsin has a substantial number of inter-organizational arrangements dealing with dissemination. The most surprising arrangement centered on the University of Wisconsin Extension and the continuing education agents. These agents are apparently adapted from the cooperative extension model.

The second finding of interest deals with the number of districts criss-crossing the state. Each state agency appears to have its own set of geographical units for delivering services. The SEA has 436 school districts and 19 Cooperative Education Service Agencies; the University of Wisconsin Extension has seven extension districts; and the Board of Vocational, Technical, and Adult Education has 16 districts.

The third finding is really part guess and part inference, namely, that Wisconsin conducts a substantial amount of dissemination but that the agencies and actors are not fully aware of counterpart activities. It appears that state agencies and organizational units within agencies do not coordinate dissemination efforts. This finding should not come as a startling surprise, given the lack of interdependence of agencies, the different messages of agencies, and the different audiences of agencies. This finding is also predictable based on the conceptual dimensions introduced at the beginning of this study. In other words, power and resources influence inter-organizational arrangements in general, and domain consensus, ideological consensus, evaluation, and work coordination influence inter-organizational arrangements in particular. Each state agency has its own power and resource interests and any attempt to create inter-agency efforts for dissemination must deal with the power and resource issues.

The implications for nationwide dissemination policy fall into two contrasting views. The first view is that a coordinated statewide dissemination effort should be created which takes into account the dynamics of organizational drives for power and resources. Such an effort would involve the redistribution of power and resources into new configurations. This undertaking is extremely difficult to consider on a nationwide scope. The second view is to support the current amount of dissemination that is going on through multiple channels with many different messages and that is directed to different audiences.

In other words, this view says that although redundancy and lack of interdependence may be inefficient on one hand, the redundancy can be functional and effective on the other. It also recognizes the reality of established power and resources as barriers to any large-scale statewide dissemination effort. Clearly, these two views are at extreme ends of a continuum of alternatives. We would hope that these two views will serve as catalysts for the development of dissemination arrangement alternatives.

Utah

Sources of information for describing dissemination arrangements in Utah were limited. The advantage of having personal knowledge of the SEA and state institutions was lacking. Informants had limited information on dissemination and/or they were reluctant to share information with an outsider. Consequently, the depth of reporting for Utah is quite shallow, and therefore Utah appears to be less complex than Wisconsin. Our guess is that, upon closer scrutiny, Utah would appear more complex than as described here, but would still be relatively simple when compared to other states such as Wisconsin.

Background

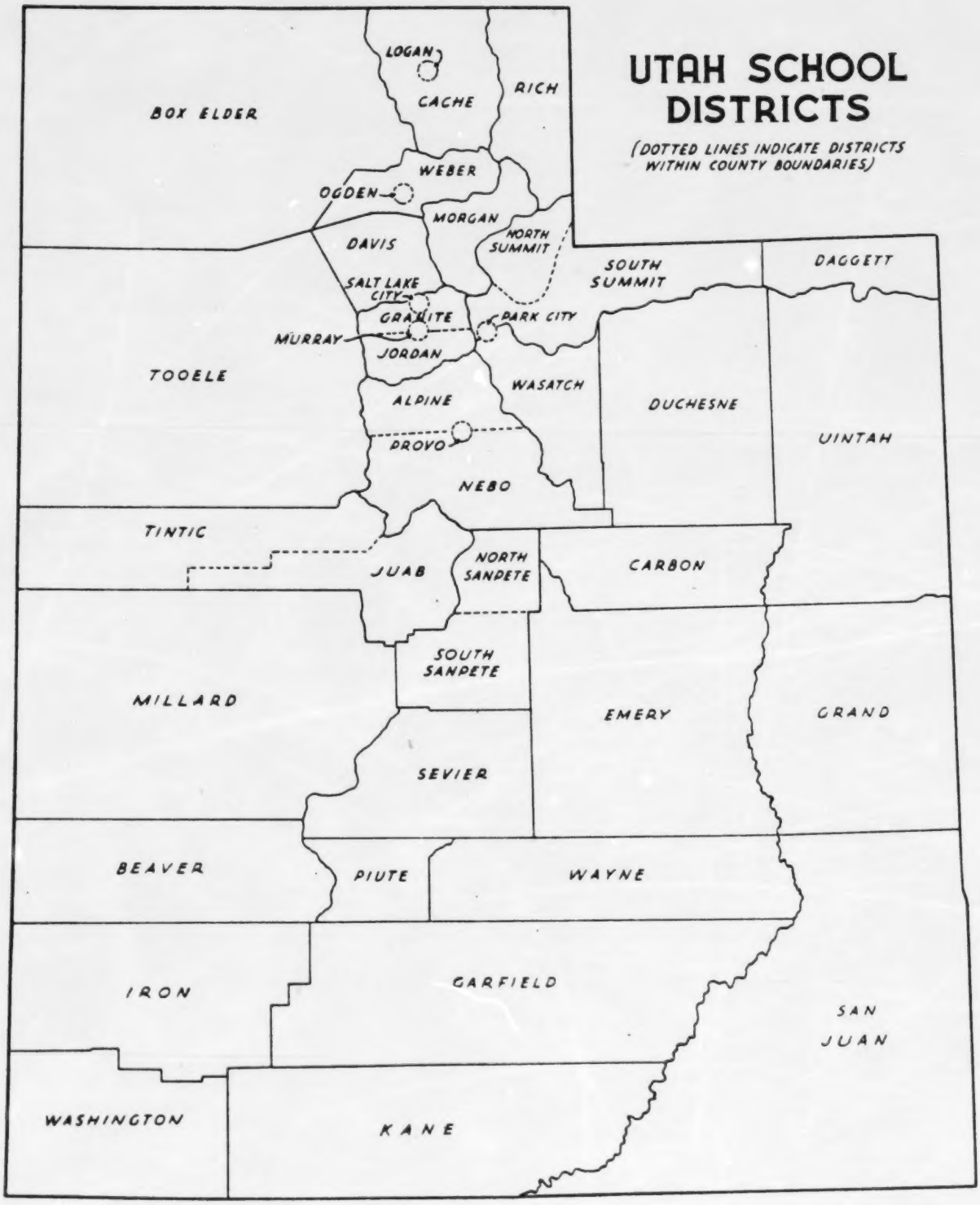
Utah is a rural state. It ranks 36th in population (with 1,168,000 people) and ranks 43rd in population per square mile (15.4). It is also a poor state in terms of per capita personal income, ranking 45th. Nevertheless, the state makes a major effort to support education. It ranks first in education expenditures as a percentage of personal income, and education makes up 51 percent of all state and local government expenditures. The U. S. average is 39 percent.

Educational Systems

Utah has a State Board of Education responsible for elementary, secondary, and special education schools; it is also responsible for vocational post-secondary schools. Universities, colleges, and technical colleges are responsible to a Board of Regents.

There are 40 school districts, ranging from 60,000 to 200 pupils (see Figure 6). In 1977 public school enrollment was 317,175 (99 percent of

Figure 6


UTAH SCHOOL DISTRICTS
(DOTTED LINES INDICATE DISTRICTS WITHIN COUNTY BOUNDARIES)
LOGAN
CACHE
RICH
BOX ELDER
WEBER
OGDEN
MORGAN
DAVIS
NORTH SUMMIT
SOUTH SUMMIT
DAGGETT
SALT LAKE CITY
GRANITE
PARK CITY
MURRAY
JORDAN
TOOELE
WASATCH
DUCHESNE
UINTAH
ALPINE
PROVO
NEBO
TINTIC
JUAB
NORTH SANDETE
CARBON
SOUTH SANDETE
MILLARD
EMERY
GRAND
SEVIER
BEAVER
PIUTE
WAYNE
IRON
GARFIELD
SAN JUAN
WASHINGTON
KANE

total school enrollment). In other words, private elementary and secondary schools accounted for only one percent of total enrollment. This figure is in contrast to 12 percent nationally.

Twenty-six rural districts are served by four regional service centers. There are two state universities, two state four-year colleges, three state two-year colleges, two technical colleges, and seven area vocational centers. There is one large private university and one small private college. Total enrollment in 1977, excluding area vocational centers, was 85,167. The 1970 census ranks Utah first in the nation in median school years completed by its adult population (12.5 yrs.). Associated with this high achievement is Utah's holding power of 99 percent for grades seven through twelve.

Utah State Board of Education

The Utah SEA is organized into three offices, nine divisions, and three units. Seven of the nine divisions have contact with LEA personnel. Figure 7 provides an organization chart of the Utah SEA. The Division of Research and Planning is concerned with dissemination; it houses the Utah Capacity Building Grant project.

Utah's Intermediate Service Agencies

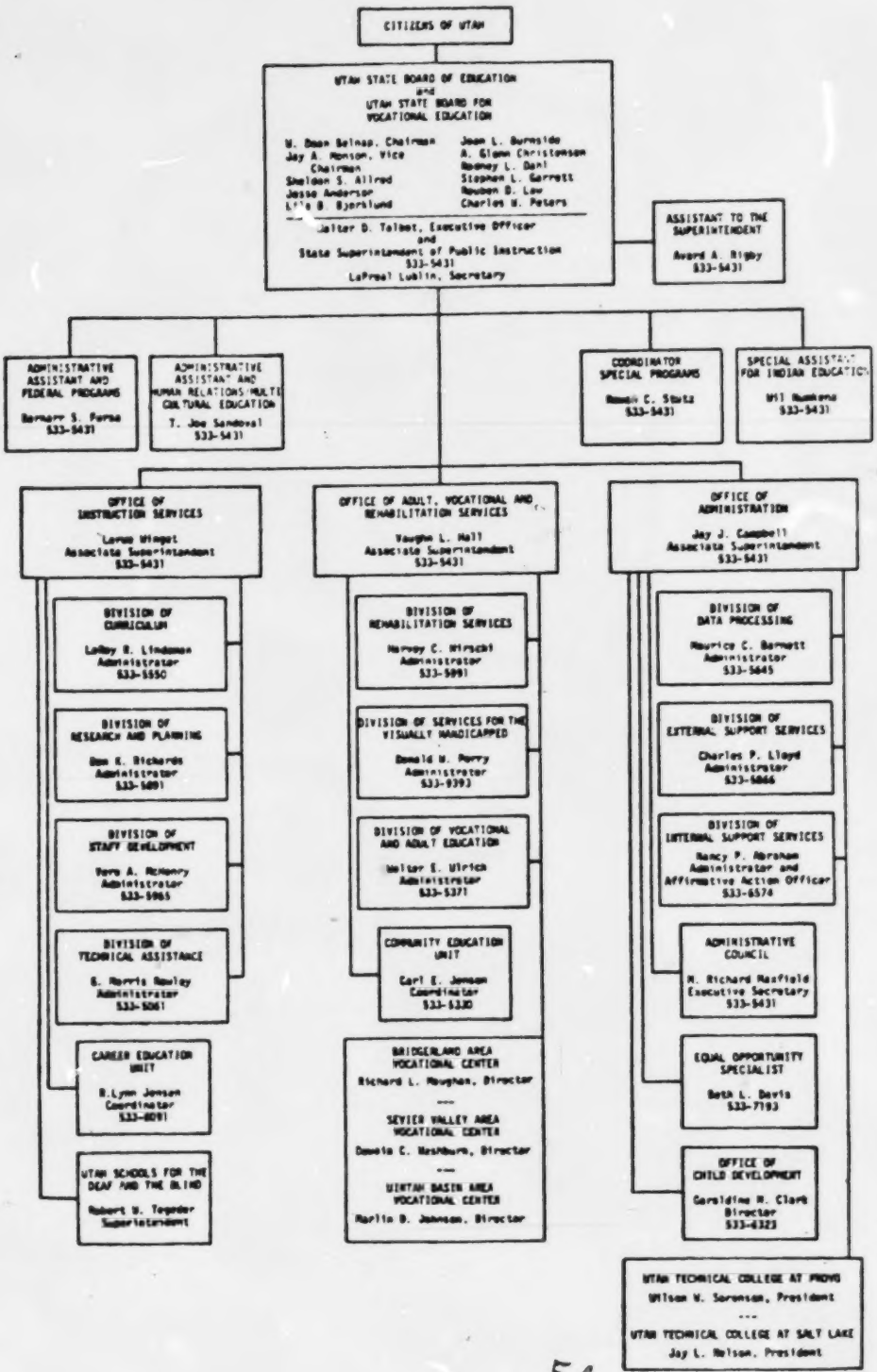
Utah's four intermediate service agencies serve 26 rural districts. These districts have less than 15 percent of the total public school enrollment. The ISAs are called Regional Service Centers (RSC). They are governed by the LEAs, not by the SEA. They are not intermediate units of the state agency. They grew out of a number of ESEA Title III joint programs funded during the late 1960s and early 1970s. The legislature provides base sup-

Figure 7

ORGANIZATION CHART

Utah State Board of Education

Utah State Board for Vocational Education



port for the RSCs. The RSCs have been able to attract discretionary funds and therefore have increased their staff and their services. By and large, they do not deal with dissemination as an explicit need, activity, or program; however, they provide a variety of school improvement oriented services to LEAs.

Inter-Organizational Arrangements

Dissemination Arrangements Within USBE

A major thrust of the Utah Capacity Building Grant is to develop a comprehensive resource base. The resource base has been expanded, but awareness and use of the resource base by SEA staff has not met expectations. There is a documented lack of leadership and a concomitant lack of coordination of dissemination. This situation appears to be the primary cause for the under-use of the resource base. A list of 11 conclusions dealing with the status of the Utah SEA dissemination is presented below. These are based on an inventory done by the state capacity building staff in January, 1978.

1. The SEA has access to a rich resource base, including DIALOG data banks; NDN resources; the NWREL Rx; a media/resource center; the Utah LRDC, a human resource file; networks such as the Woman's Educational Equity Communications Network and the Teachers' Centers Exchange (via Far West Laboratory); the resources at several nearby universities and libraries; files describing local promising practices; catalogs and curriculum guides; workshops; and human resources available for consultation.

2. However, this resource base is not routinely used by SEA or LEA staff. The major reasons appear to be difficulty in using it due to its being fragmented and the lack of awareness and previous use experience on the part of staff.

3. The SEA should coordinate access to the existing resource base.

4. Mechanisms are needed whereby SEA staff are informed and periodically reminded of the existence and use of resources.

5. The resource base could be strengthened by clarifying and updating procedures for validating and disseminating local promising practices.

6. Information about validated practices should be made available to and disseminated by those on the staff who act as resource-finders and solution-givers.

7. Relationships with universities and other outside resource organizations should be further cultivated.

8. The Human Resource File has fallen into disuse. It should be redeveloped and used.

9. There is needed a procedure whereby state-produced documents of different types are routinely sent to appropriate receivers. A procedure exists for major documents, but even it needs updating, elaborating, and enforcement.

10. One important kind of information is that regarding local needs. There exist many sources of information on needs of Utah schools. These should be synthesized and brought to bear on the process by which the State Board's areas of special emphasis are determined.

11. At some point, the SCB project needs to consolidate the various resource-coordinating mechanisms into subsystems for identifying information needs and demand characteristics, promoting LEA awareness of resources, providing access to and quality control for resources, and distributing resources.

A promising internal organizational arrangement is centered around the administrative council. The council advises the chief state school officer and has agreed to consider dissemination coordination issues. It is much too early to tell whether or not this internal arrangement for dissemination coordination will be successful.

One arrangement which differs in Wisconsin and Utah is the organizational placement of the NDN State Facilitator. In Wisconsin, the State Facilitator (a holder of a doctorate in education from the University of Wisconsin) is located with a group of curriculum specialists. There is little coordination between the curriculum/subject specialists and the dissemination/processing staff responsible for state capacity building. In Utah, the NDN State Facilitator is the same person responsible for state capacity building. This arrangement eliminates one communication problem associated with separating the two positions in different organizational units. However, the Utah

arrangement has the limitation of not having a subject specialist to interpret and facilitate the awareness and use of curriculum products. It would be interesting to study and compare these two arrangements.

Dissemination Arrangements Between Universities/LEAs

Essentially three dissemination-related activities are carried out by universities in Utah: courses, workshops, and consultations. These activities, associated with a variety of organizational arrangements, are modified by Utah's geography.

For example, in the 1976-77 school year, more than 375 education courses were offered by Utah State University. Of these, more than 45 percent were taught by adjunct faculty. The adjunct faculty tend to be LEA and SEA staff. This arrangement allows Utah State University to expand its outreach without expanding full-time staff. Regular faculty periodically observe and monitor the adjunct faculty. Small planes are used to ferry faculty to remote areas of the state.

A second example of a university organizational arrangement involves networks. Utah has a state IGE (Individually Guided Education) Network which includes members from Utah State University, and a professor at Brigham Young University has developed a network among rural schools.

A third example of an organizational arrangement involves the Extension division. Utah State University has identified a liaison person for each college within the university to act as a link between the extension division and the academic divisions. The liaison/linkage person facilitates the use of academic staff in outreach activities.

A fourth example of an organizational arrangement involves the Cooperative Extension. In this case, specialists assigned to appropriate academic

departments serve the county agents, who are considered to be generalists. This arrangement serves as a notable response to the question as to whether linkage agents should be generalists or specialists.

Two examples of extension practices illustrate the individual arrangements for facilitating university outreach. In some instances the extension division will buy the time of faculty to promote courses, workshops, or other extension services. In other instances, the extension will place an LEA staff member on retainer to act as an extension representative. The staff member fulfills the role of a contact person, counselor, and informant for LEA staff. This approach appears to be ingenious for expanding outreach and building good LEA rapport. As many as ten LEA staff have been placed on retainer in a single school year.

As with Wisconsin, Utah has a state television network and a state tele-conference system. Both are used to reach sparsely populated areas of the state.

The dissemination arrangements described for Utah appear to be rather sparse. This outcome is partly due to the lack of information about Utah. Even though information was less available, we can infer that Utah's dissemination arrangements are relatively less complex than those in Wisconsin.

Summary

Utah's geographical conditions and population sparsity influence the extent and intensity of dissemination activities. Inter-organizational arrangements appear to be limited. The most interesting arrangements discovered dealt with the Utah State University Extension. That some local

school staff are put on a retainer to represent the University strikes us as an innovative approach for fostering trust and rapport and for building inter-organizational relationships. The second interesting finding deals with the cooperative extension. Since the field agents are considered generalists, the university has identified specialists in appropriate departments to act as a resource for the agents. This response appears to be workable in terms of the issue of linkage agents as specialists or as generalists.

The picture of dissemination arrangements drawn for Utah is sketchy at best. The contrast between Wisconsin and Utah is due in part to the difference in the quantity and quality of information on dissemination arrangements.

Research Agenda

The Conceptual Framework presented here needs expansion, refinement, and verification. It seems to have potential for stimulating new insights and understandings of inter-organizational arrangements. Examples of research issues are presented below. Essentially, two criteria have guided the examples: promise of high predictive power or ease of program manipulation.

Predictive power is especially important for funding agencies which must make funding decisions based on the likelihood of successful performance. Manipulative ease is important for program administrators responsible for designing effective arrangements. Manipulative factors are those which can be changed, as contrasted to factors which defy change. Examples of manipulative factors are level of funds, staff skills, and organizational variables such as locus of decision-making and ease of communication.

Examples of nonmanipulative factors are number of pupils in state, area of state, and such hard-to-change factors as degree of progressiveness of the state legislature, historically-based attitudes toward education, and laws, rules and regulations which have a bearing on inter-agency cooperation. Hence, research should test these notions:

- Predictive power should be sought between the concepts of power and resources as controlling variables on the four dimensions of domain consensus, ideological consensus, positive evaluation, and work coordination.
- Predictive power should also be sought between the four dimensions and such contextual variables as organizational specialization, form of state government, and patterns of agency governance.
- Contextual variables having predictive promise and/or having manipulative characteristics need to be identified. For example, complementarity of resources may predict degree of domain consensus. Amount of face-to-face communication may be associated with ideological consensus and work coordination. Frequent interaction influences shared values and allows tasks to be mutually adjusted. The amount of face-to-face communication is a manipulative factor.

Although these are only a few research suggestions, the complexity of the research tasks should not be underestimated. Studies of inter-organizational relationships based on a perspective derived from organizational theorists are few in education. Greater familiarity with organizational theories and terminology is needed. Case studies of inter-organizational arrangements should be the dominant research methodology. The studies should be exploratory, open-ended, and imaginative. Studies from outside of education should be used to guide initial investigations; for example, studies of hospitals cooperating and of health and welfare agencies cooperating. There are few examples of private businesses legally cooperating due to antitrust constraints.

This research agenda is intended to sketch the outlines of a major effort to increase understanding of the dynamics of inter-organizational arrangements.

Policy implications of two extreme approaches for increasing and improving state dissemination follow.

Policy Implications

In retrospect, what implications for dissemination policy can be drawn from this case study? There are essentially two questions of interest to federal-level dissemination policy formulators: what should the federal government do to improve and expand education dissemination in the states? and How should it be done? Assuming agreement that these questions should be asked, one can draw contrasting, although synthetic, responses from the two case studies presented here.

One response argues for federal support of existing state dissemination arrangements. This response recognizes the complexity, history, and experience associated with state arrangements. It recognizes that restructuring state dissemination arrangements involves new inter-organizational configurations and that these, in turn, involve shifts in power and resources. Concomitantly, this view maintains that the federal government should not get involved with power and resource disputes at the state levels. This view asserts that those who are physically and psychologically distant from a state do not have the information or time to learn about the history, traditions, expectations, and values of that state. What is being asserted here is that each state has a unique culture that would influence the acceptance, implementation, and maintenance of a statewide dissemination system. In addition, this view would contend that the federal government lacks the staff and information to initiate major new state dissemination configurations. In summary, this view approaches the configurational perspective described

In summary, this view approaches the configurational perspective described by Clark and Guba.

The contrasting response argues for extensive federal involvement in the restructuring of state dissemination arrangements. The objective of this view is the creation of statewide coordinated and consolidated dissemination systems. This view gives recognition to wasteful and inefficient duplication of state dissemination arrangements. It implies that current state arrangements are inadequate at best and non-existent at worst. Federal capability to influence state dissemination arrangements is assumed to exist. This view argues that states have common elements, conditions, and needs which can be addressed and encompassed by a dissemination model. This model may take into account some state peculiarities, but by and large it treats states as comparable units which are to be given a fairly standard treatment. Proponents of this view would argue that counter-productive power and resource issues can be prevented through the careful allocation of funds for specific tasks. Also, project monitoring and evaluation along with detailed planning documents would constrain any dysfunctional inter-organizational disputes. In summary, this view maintains that the federal government has the broad perspective needed to improve dissemination in the states and that a planned, coordinated, and rational system can and should be created to meet this need. Although there are organizationally-based constraints, these can be overcome through cooperation with the states.

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